Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



BUREAU OF CHEMISTRY,

California Wild Flowers

E 1018

(200

Theodore Payne

LIBRARY

200 =

U. S. Department of Agrica

orders sent:

1918, Spring & Full.

1919, Sept. 2.

Price, Fifteen Cents

T. WELLY chen dusp Workington

CALIFORNIA WILD FLOWERS

THEIR CULTURE AND CARE

A TREATISE DESCRIBING OVER A HUNDRED BEAUTIFUL SPECIES, WITH A FEW NOTES ON THEIR HABITS AND CHARACTERISTICS

THEODORE PAYNE



COPYRIGHT 1910, BY THEODORE PAYNE COPYRIGHT 1914, BY THEODORE PAYNE COPYRIGHT 1916, BY THEODORE PAYNE

THEODORE PAYNE

345 S. MAIN STREET, LOS ANGELES, U.S.A.

INTRODUCTION AND CULTURAL NOTES

We are just beginning to really appreciate our native plants, trees and shrubs, and to realize fully their beauty. charm and value for cultivation in our gardens. In hunting the world over for exotics to bring here, we have exhausted the supply from many lands, until few countries have as large and varied a list of plants from all climes as are represented in the gardens of California. Yet we have neglected many of the most beautiful, the most interesting. and also the most appropriate of all, because they harmonize so perfectly with our surroundings, and are so well adapted to our climate and conditions; our own native plants, planted here by nature herself, the first of all gardeners. When we wander out into the hills, in the canyons, or by the mountain streams, and see the gnarled old sycamores, picturesque live oaks, or the tall, stately maples and cottonwoods, the banks covered with wild grape vines, California fuchsias and honeysuckles, the open plains of golden poppies, or even the dry hillsides with the Spanish bayonets standing erect, their many thousands of white flowers glistening in the sunshine, we realize after all how set, how formal, and how limited have been our own garden plots, compared with all the wild beauty and grandeur of the native landscape. We want some of this right near us, in our own grounds. A little nook here, or a little patch there, only let it be just "wild."

The appreciation that many of my friends, and the public, have shown in my work of collecting and growing our California native flowers, trees and shrubs, has induced me to issue this little booklet, with the hope that it may be a source of interest and service to many, and that they may be induced to try at least a few of the species described herein, in their own gardens.

Some very fine effects can be had by planting many of the perennials in large masses, or in groups or clumps between shrubbery or trees, and in nooks and corners. Some of the most desirable are the Pentstemons, especially P. spectabilis, a tall growing species with long spikes of rich blue and purple flowers; P. centranthifolius or the "Scarlet Bugler" as it is commonly called, with its vivid scarlet flowers and glaucous green stems and foliage; the Scarlet Larkspur, a tall, much-branched plant, with bright scarlet flowers; the Blue Larkspur, the Castillejas or "Paint Brushes," the wild Columbine, the Lupines, the California fuchsia and the Solanums.

The seeds of the perennials can be sown in pots or seed boxes, using light, well-drained soil, covering the seed very lightly, and as soon as large enough the plants can be transplanted; or the seed may be sown in the open ground where the plants are to remain and flower. I have had good results with many species from the latter method, but great care must be taken not to disturb the beds during the dry or dormant period, as one is apt to forget that they are there, and the plants are easily destroyed.

For shady and partially shady locations the native lilies can be used to great effect, the Lilium humboldtii being of particularly easy culture and free flowering. The Fritillarias, Erythroniums, Brodiaea coccinea, Calochortus pulchellus and C. albus are also suitable for shady places, while for sunny locations the other species of Brodiaea and Calochortus can be used.

For those who want quick results with the least possible labor and expense the annuals will always be the most popular. For large places where there are trees, banks and slopes, hollows or open stretches of ground the most marvelous effects can be produced in a few months by sowing the seed broadcast in these spots, while for small gardens a patch of native annuals would always be a source of great interest and beauty. In sowing California wild flower seeds follow nature as much as possible, scatter the seeds broadcast over the ground and let them come up after the rains commence. Wherever practicable it is best to work up the surface of the ground and pulverize with a fine rake; afterwards the seeds can be scattered broadcast over the ground. A very good time is just before a rain, or even while it is raining, if it can be so arranged. They require practically no further attention, and will succeed with an average amount of rainfall without artificial irrigation. In dry years, of course, watering would be beneficial, and in cases where very quick results are desired, frequent waterings will produce a quicker growth. The seeds can also be sown later on in the season, up to about February, and if sprinkled frequently many species will flower quite profusely, though they will not succeed as well as those sown in the fall. Many of our vacant town lots could be sown broadcast with wild flowers, producing little beauty spots for several months in the year. If vacant lots should be used, however, the ground should be plowed up some time before, and thoroughly watered, so that all the weed seeds would start to grow, and as soon as large enough the weeds should be hoed off, several times, if necessary. This is very important, as most of the vacant lots are so abundant in weeds that the flower seeds would be choked out. After the weeds have been exterminated, the surface of the ground can be worked up, with a rake, and the seed sown. The above remarks refer entirely to California.

In the eastern states the seed should be sown in spring after danger of frost is over. Most species will prove successful there, and be highly prized.

While nearly all the annuals listed in this booklet will succeed in the open sunlight, there are some which do quite well in shade or partial shade, and others which require it. On page 4 I have given a list of the best kinds for planting in shady places, also some desirable kinds for very hot dry locations, and lists in separate colors for producing a succession of bloom, given as nearly as possible in the order in which they commence flowering; some low growing kinds for small beds, and a list of perennials for dry banks.

CALIFORNIA NATIVE TREES AND SHRUBS

I make a specialty of growing native trees, shrubs and perennial plants, and issue price lists, from time to time, of the kinds I have large enough for sale. The latest list will be mailed free on application.

CALIFORNIA WILD GARDENS

I am prepared to give advice on the subject of making wild gardens, and am also equipped for carrying out the work. Estimates furnished and correspondence invited.

California Wild Flower Seeds for different Situations and Color Effects

For those who have large grounds and require a quantity of seed I will be pleased to quote special prices on any kinds that I am able to offer in large quantities, and for those who simply desire mixtures of different kinds, the price will be found on page 21 of this booklet.

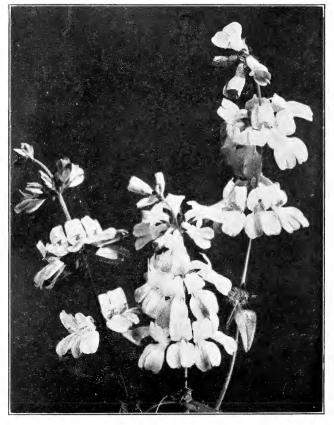
- Annuals for shady and partially shady places. Nemophila aurita, Nemophila insignis, Nemophila maculata, Collinsia bicolor, Floerkia douglasii, Godetia bottae, Godetia amoena, Godetia grandiflora, Meconopsis heterophylla, Clarkia elegans and Clarkia concinna.
- Annuals for very dry sunny places. Mentzelia lindleyi,
 Layia gladulosa, Layia elegans, Eschscholtzia californica, Helianthus annuus, Argemone platyceras hispida,
 Phacelia whitlavia, Phacelia grandiflora, Phacelia tanacetifolia, Salvia carduacea, Mimulus brevipes, Antirrhinum
 coulterianum, and Eriophyllum confertiflorum.
- Annuals in orange, yellow and cream shades, given as nearly as possible in the order in which they commence blooming. Baeria gracilis, Coreopsis douglasii, Coreopsis stillmani, Eschscholtzia californica, Platystemon californicus, Malacothrix californica, Layia elegans, Floerkia douglasii, Mimulus brevipes, Mimulus luteus, Mentzelia lindleyi, Eriophyllum confertiflorum, and Helianthus annuus.
- Annuals in blue, purple and lavender shades. Nemophila insignis, Nemophila aurita, Gilia achillaefolia, Phacelia whitlavia, Phacelia tanacetifolia, Phacelia parryi, Lupinus affinis, Lupinus nanus, Gilia tricolor, Gilia abrotanifolia, Phacelia grandiflora, Salvia carduacea, Gilia capitata, and Eustoma silenifolium.
- Low growing annuals for small beds or borders. Nemophila insignis, Nemophila maculata, Baeria gracilis, Coreopsis douglasii, Coreopsis stillmani, Floerkia douglasii, Platystemon californicus, Gilia dianthoides, Orthocarpus purpurascens, Malacothrix californica, and Erythraea venusta.
- Perennials for dry banks. Zauschneria californica, Lupinus arboreus, Encelia californica, Trichostema lanatum, Pentstemon heterophyllus, Pentstemon spectabilis, Pentstemon antirrhinoides, Pentstemon palmeri, Oenothera californica, Gilia californica, Mimulus glutinosus, and Lavatera assurgentiflora.

CALIFORNIA WILD FLOWER SEEDS

- Abronia umbellata. "Sand Verbena." Annual of low trailing habit. Flowers delicate rose, resembling a verbena. Of easy cultivation, thriving best in sandy soil. Pkt. 5c; oz. 50c.
- Adenostoma fisciculatum. "Greasewood." Evergreen shrub. 3 to 10 feet high, with small clustered needle-like leaves. Flowers white, in large feathery panicles which contrast well against the dark olive green foliage. A splendid flowering shrub for planting in dry places. Pkt. 10c.
- Antirrhinum coulterianum, "White Snapdragon," Annual 3 to 5 feet high. Small white flowers in spikes often 2 feet long. Pkt. 10c.
- Aquilegia truncata. "Columbine." Perennial 2 to 3 feet high. Flowers deep scarlet tipped with yellow. Stems slender and fascinatingly graceful, with leaves beautifully escalloped. One of the most winsome of native beauties. Seed is best sown in seed boxes or pans and afterwards transplanted. Prefers a moist, shady situation. Pkt. 10c,
- Argemone platyceras hispida. "Prickly Poppy." Annual 1½ to 3 feet high. Flowers 2 to 3 inches in diameter, white, crepe-like petals and bright yellow center, much resembling the Matilija Poppy. Leaves gray-green, densely covered with pale yellow spines. Beautiful, striking, and curious. Pkt. 5c.
- Baeria gracilis. "Sunshine." Annual 4 to 8 inches high. A very graceful little plant with minute foliage and golden yellow star-shaped flowers. Very attractive for borders or for sowing in masses in small beds. Pkt. 5c.
- Bloomeria aurea: "Golden Stars." Bulb, height 9 to 15 inches. Flowers in umbels of from 15 to 50 goldenvellow star-shaped blossoms. Thrives best in heavy but well drained soil. Pkt. 10c.
- Calochertus catalinae. "Mariposa Lily." Bulb, height 1 to 2 feet. Large handsome flowers, white or lilac with a large maroon spot at the base of each petal. Pkt. 10c.
- Calochortus plummerae. "Late Flowering Mariposa Lily."
 Bulb, height 2 to 3 feet. Large flowers, rich lavender purple, lined with long yellow, silky hairs. Pkt. 10c.
- Carpenteria californica. Evergreen shrub 5 to 10 feet high. This rare and beautiful shrub is found in some of the gorges of the Sierra Nevada mountains and is one of the most desirable of our native plants. Leaves rather narrow, light green on the upper surface, whitish beneath, smooth or sometimes with a few scattered teeth on the margin. Flowers in clusters, usually of 5 to 7 and occasionally as many as 12 or more; large, pure white with yellow stamens and with a fragrance like the Mock Orange. Pkt. 25c.
- Castilleja martini. "Indian Paint Brush." Perennial 1 to 2 feet high. Flower bracts in dense clusters green at base turning off into a bright scarlet. Appearance of having been dipped in fresh paint, hence its common name. The color is the most vivid scarlet; a most attractive flower. Pkt. 10c.

Castilleja foliolosa. "Woolly Paint Brush." Perennial 10 to 15 inches high. Leaves small and narrow; the whole plant covered with a soft whitish wool against which the bright vermilion scarlet flower bracts show up to great advantage. Pkt. 10c.

Ceanothus divaricatus. "California Lilac." Shrub 5 to 10 feet high. One of the most beautiful of our native shrubs, with glaucous green foliage and large clusters of pale blue, fragrant flowers, blooming early in spring. Soak the seed in hot water a few hours before sowing. Pkt. 15c.



COLLINSIA BICOLOR "Innocence" For description see page 7.

Clarkia concinna. "Beautiful Clarkia." Annual 8 inches to 2 feet high. A charming plant found on many shady banks in the northern part of the state. The petals are curiously cut into three lobes, rose-pink in color while the sepals are crimson, a rather odd combination of

colors. Pkt. 5c; oz. 50c.

Clarkia elegans. Annual 3 to 6 feet high. An erect growing, slender, branching plant. The flowers are very attractive, the white and crimson stamens and purple petals give a pronounced yet delicate effect. Pkt, 5c; oz. 40c; lb. \$5.00.

Collinsia bicolor. "Innocence." Annual 1 to 2 feet high. Of slender, graceful habit, with bright green foliage. Flowers in clusters regularly disposed, suggesting rows. Upper lip white or lilac, lower rose-purple. Pkt. 5c; oz. 25c; lb. \$2.50.

Coreopsis douglasii. "Yellow Daisy." Annual 6 to 12 inches high. A tender looking, graceful plant, with finely cut, thread-like leaves and yellow flowers of a peculiar brightness, more sunshiny than buttercups. Pkt. 10c.



DELPHINIUM CARDINALE
"Scarlet Larkspur"

Coreopsis maritima. "Sea Dahlia." Perennial 2 to 2½ feet high. A stout growing plant with finely cut foliage and large showy flowers 3 to 4 inches in diameter, light canary yellow. Valuable for cutting, the blossoms lasting a long time in water. Pkt. 10c.

Coreopsis stillmani. "Yellow Mountain Daisy." Annual 9 to 12 inches high. Similar to C. douglasii, but with larger flowers and more bushy in growth. Flowers bright yellow. From the Sierra Nevada mountains. Pkt. 15c.

Delphinium cardinale. "Scarlet Larkspur." Perennial 3 to 6 feet. A tall, branching plant with long spikes of bright scarlet flowers. Gorgeous and majestic. Pkt. 10c.

Delphinium parryi. "Blue Larkspur." Perennial 1 to 3 feet high. Flowers large, rich blue. A plant of delicate poise and graceful habit; leaves somewhat kidneyshaped. Pkt. 10c.

Dendromecon rigidum. "Tree Poppy." Perennial shrub 4 to 8 feet high. Graceful willow-like foliage and bright-yellow flowers 3 inches or more in diameter; blooms nearly all the year round. Seed is hard to germinate. Pkt. 15c.



GODETIA GRANDIFLORA
"Farewell to Spring"
For description see page 13.

Dicentra chrysantha. "California Bleeding Heart." Perennial 3 to 4 feet high. Pretty deeply cut glaucous foliage and rich yellow flowers. Pkt. 10c.

Dodecatheon clevelandi. "Shooting Star." Perennial 1 to 1½ feet high. Flowers in shape like the cyclamen, varying in color from delicate lilac to pure white; the petals are ringed at the base with pale yellow, and the beak of the flower is violet-purple; very fragrant. One of the most interesting of our native flowers. Pkt. 10c.

Dudleya pulverulenta. "Giant Dudleya." An odd looking succulent having large leaves in a symmetrical rosette from which rise flower stems 2 to $2\frac{1}{2}$ feet high crowned with large numbers of pale red blossoms. Both the leaves and flower stems are covered with a dense white bloom as if dusted over with flour. Pkt. 15c.



LUPINUS NANUS
"Dwarf Blue Lupine"
For description see page 16.

Emmenanthe penduliflora. "Whispering Bells." Annual 1 to 2 feet high. A branching plant producing a quantity of bell-shaped, pendulous flowers, cream-colored or yellow. The flowers dry intact on the plants and with a slight breeze cause a delicate rustling sound, hence the name of "Whispering Bells." The flowers may be cut and dried and will keep like an everlasting flower. The seed is not easy to germinate. In the wild state the plants appear in immense quantities after a mountain fire and then almost entirely disappear again; this would indicate that either the intense heat or the lye in the ashes acts on the seed causing it to sprout. Probably the best way to start the seed would be to sow broadcast and burn a quantity of brush over it. Pkt. 10c.

Encelia californica. "Bush Sunflower." Perennial shrub 2 to 6 feet high; found growing on dry hillsides and blooming profusely. Flowers somewhat resembling a single sunflower, bright yellow with dark brown centers. Pkt. 10c.

Eriophyllum confertiflorum. "Golden Yarrow." Annual 1 to 2 feet high, branching from a woody base. Leaves divided into from 3 to 7 divisions and covered with a soft whitish wool. Flowers in densely crowded flattopped clusters, color rich golden yellow. A showy flower valuable for cutting and lasting a long time in water. Pkt. 10c.



MENTZELIA LINDLEYI
"Blazing Star"
For description see page 17.

Eriodictyon parryi. Shrubby perennial 3 to 6 feet high. A stout growing plant with numerous, long, narrow, dark green leaves and very long spikes of violet blue flowers. Seed is hard to germinate. Pkt. 10c.

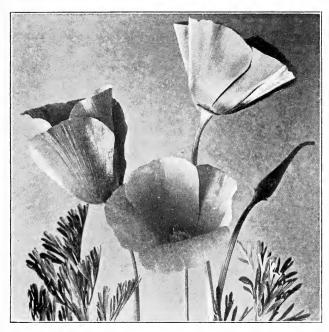
Erysimum asperum. "Wild Wallflower." Perennial 2 to 4 feet high. Erect growing plant with long spikes of large orange-colored flowers very handsome and striking. Pkt. 10c.

Erysimum grandiflorum. "Coast Wallflower." Perennial 1 to 2 feet high, often forming a much branched woody plant, generally found growing on sand dunes along the coast. Flowers cream-colored or light yellow. Pkt. 10c.

Erythraea venusta. "Pink Gentian." "Canchalagua." Annual 4 to 8 inches high, belonging to the Gentian family. Very showy, clear pink, star-shaped flowers produced in great numbers; blooms in early summer after most of the spring flowers are over. One of the most charming of our wild flowers and no plant is more deserving of cultivation. Would be especially valuable for small beds and borders; requires very little moisture;

might also prove successful as a pot plant; the plants branch from the ground, each branch terminating in a head of flowers which bloom at the same time; each plant forming a perfect little bouquet in itself. Pkt. 15c.

Eschscholtzia californica. "California Poppy." Annual 1 to 1½ feet high. The most noted of California wild flowers. Dream and despair of artists. The emblem of our Golden State. The SpanishAmericans gave this our Golden State. The Spanishamericans gave this flower a pretty and appropriate name, Copa de Oro or "Cup of Gold." Flowers 2 to 3 inches in diameter, orange-yellow with a beautiful glossy sheen. Graygreen finely cut foliage. Pkt. 5c; oz. 25c; lb. \$2.50.



ESCHSCHOLTZIA CALIFORNICA "California Poppy"

Thy satin vesture richer is than looms
Of Orient leave for raiment of her kings!
Nor dues of olden Tyre, not precious things
Regathered from the long-forgotten tombs
Of buried empires, not the iris plumes
That wave upon the tropics' myriad wings.
Not all proud Sheba's queenly offerings
Could match the golden marvel of thy blooms.
For thou art nurtured from the treasure-veins
Of this fair land; thy golden rootlets sup
Her sands of gold—of gold thy petals spun.
Her golden glory, thou! On hills and plains,
Lifting, exultant, every kingly cup
Brimmed with the golden vintage of the sun Thy satin vesture richer is than looms Brimmed with the golden vintage of the sun. -INA D. COOLBRITH.

Eustoma silenifolium. Annual 9 to 15 inches high. An erect growing plant belonging to the Gentian family. Leaves broad, opposite, glaucous green; flowers light blue or purple. Pkt. 15c.

Floerkia douglasii. "Meadow Foam." Annual 6 to 9 inches high. A low spreading plant with finely cut leaves and cream colored flowers. Grows in moist places. Pkt. 5c; oz. 40c.

Fremontia californica. "California SlipperyElm." Shrub 5 to 20 feet high. Found by General Fremont when crossing the Sierras, and named in his honor. It reaches its greatest perfection on the desert side of our mountains, and flowers in early summer, when the bushes are simply a mass of golden yellow flowers, two to three inches across. No more glorious sight can be imagined than a mass of these shrubs in full bloom. The seed is hard to germinate. Pkt. 15c.



MALACOTHRIX CALIFORNICA For description see page 16.

Gilia abrotanifolia. Annual 1½ to 2½ feet high. Of slender habit with a few ascending branches bearing large terminal heads of delicate pale blue flowers, almost as large as the common Scabiosa of our gardens, and indeed at first sight reminding one of that flower. Quite desirable for cutting. Pkt. 15c.

Gilia achillaefolia. "Blue Gilia." Annual 1 to 1½ feet high. Small lavender-blue flowers in dense heads, on graceful slender stems. Light green feathery leaves. Pkt. 5c; oz. 25c; lb. \$3.00.

Gilia capitata. "Blue Gilia." Annual 1½ to 2½ feet high. A slender growing, somewhat branched plant, with finely cut foliage and compact heads of light blue flowers. Pkt. 5c; oz. 30c; lb. \$3.50.

Gilia californica. "Prickly Phlox." Shrub 2 to 4 feet high. A most charming plant, seen growing on many of our dry hillsides. Stems covered with short prickly needle-like leaves. Flowers fragrant, in clusters, resembling the phlox in shape, of a delicate shade of rosepink and of texture like the finest silk with an exquisite sheen. Pkt. 25c.

Gilia dianthoides. "Fringed Gilia" or "Ground Pink." Annual 2 to 6 inches high. An exquisite little plant with minute leaves and Phlox-like flowers, rose colored or lilac with yellowish throat. Blending of colors and delicacy of plant indescribably beautiful. Would make an attractive border. Pkt. 15c.



NEMOPHILA INSIGNIS
"Baby-Blue-Eyes"
For description see page 18.

Gilia tricolor. "Bird's Eyes." Annual 9 inches to 1 foot high. Flowers pale lilac, yellow toward the center with five purple spots. Charming combination of colors. Pkt. 5c; oz. 25c; lb. \$3.00.

Godetia amoena. "Farewell to Spring." Annual 1 to 2 feet high. A plant of slender growth, usually found on shady banks, and flowering in great profusion. The flowers are lilac-crimson or red-pink, often with a darker center. Pkt. 10c; oz. 50c; lb. \$5.00.

Godetia bottae. "Farewell to Spring." Annual 2 to 3 feet high. A slender plant; flowers pale rose or lilac with purple dotted lines and a rich purple spot in the center. Pkt. 10c.

Godetia grandiflora. "Farewell to Spring." Annual 1 to 2 feet high. Flowers delicate pink marked with rich crimson. Remarkable for the abundance of large, beautiful flowers, often 4 inches across. Grows well in a shady place. Pkt. 5c; oz. 60c; lb. \$6.00.

Helianthus annuus, "Sunflower." Annual 5 to 8 feet high. Flowers 3 to 4 inches in diameter, deep yellow with dark brown centers; effective for decorations. Pkt. 5c.

Lathyrus laetiflorus. "Wild Pea." Perennial climber. Truly a beautiful plant, clambering as it does over or under bushes or overhanging banks, its pretty light green foliage and loose clusters of flowers, which are white or flesh-color veined with purple, produce a most charming effect. Pkt. 10c.

Lathyrus splendens. "Pride of California." A perennial climbing pea. Flowers very large, rich, deep crimson, and produced in great clusters. Truly a magnificent flower. Pkt. 15c.



ORTHOCARPUS PURPURASCENS
"Owl's Clover" or "Pink Paint Brush"
For description see page 19.

Lavatera assurgentiflora. "Tree Mallow." Shrub 5 to 12 feet high; native of San Clemente Island. It is of spreading habit with stout stems and large 5-lobed leaves 4 to 9 inches across; flowers deep rose-color with veinings of a darker shade. Of remarkably rapid growth and is especially useful for planting in beach gardens as a windbreak to protect other plants, also for planting on sand dunes and banks to hold the soil or in poultry yards for temporary shade. Pkt. 10c; oz. 35c.

Layia elegans. "Tidy Tips." Annual 1 to 2 feet high. A yellow daisy edged with white or cream color. Leaves narrow with gracefully toothed margins. Very showy: grows in light sandy soil. Pkt. 10c.

Layia glandulosa. "White Daisy." Annual 9 to 15 inches high. By some of the most critical this is considered the prettiest of all the California wild flowers. Petals clear, glistening white, thin and crepe-like; bright yellow center. Leaves grayish green. Grows in sandy soil. Pkt. 10c.

Lilium humboldtii, "Humboldt's Lily" or "Tiger Lily."

Bulb, height 5 to 8 feet. Flowers 8 to 12, arranged in a pyramidal raceme on a stout leafy stem; deep orange spotted with maroon; often 5 to 6 inches in diameter. Grows in partially shaded places in rich loam mixed with leaf mold, requires good drainage. Pkt. 10c.

Lilium parryi. "Lemon Lily." Bulb, height 2 to 4 feet. A rare and exquisite species. Flowers large, on slender leafy stems, trumpet-shaped, lemon-yellow and very fragrant. Requires a moist situation; light, sandy soil mixed with plenty of leaf mold. Pkt. 10c.



PLATYSTEMON CALIFORNICUS "Cream-Cups"

For description see page 20.

Linanthus densiflorus, "California Phlox." Annual 1 to 2 feet high. Flowers in crowded terminal clusters, rosepink or lilac with yellow throat. Most effective for sowing thickly in beds, forming a perfect mass of flowers. Pkt. 10c; oz. 50c.

Lupinus affinis. "Blue Lupine." Annual 1 to 2 feet high. A plant with stout succulent stems branching mostly from the middle, stems and foliage smooth, rich green. Flowers in large racemes, rich bluish purple. This is the finest of the annual lupines and when growing in large masses it is particularly attractive. It reaches its greatest perfection on heavy soils. Pkt. 5c; oz. 35c.

Lupinus arboreus. "Yellow Tree Lupine." Shrubby perennial 4 to 10 feet high. A most conspicuous and beautiful plant with pretty, slightly silvery foliage and rich sulphur yellow, fragrant flowers. It roots deeply and is especially valuable for sowing on banks to hold the soil. Pkt. 10c: oz. 30c.

Lupinus arboreus. "Tree Lupine." (The blue-flowered form.) This is a form of the preceding, differing only in the color of the flowers, which are bluish purple, Pkt. 10c.

Lupinus chamissonis. "Beach Lupine." Perennial 2 to 3 feet high. A beautiful plant with woody stems and attractive silvery foliage. Flowers in long racemes, light blue or lavender. The plants bloom over a long period and will grow in pure sand. Pkt. 15c.

Lupinus cytisoides. "Canyon Lupine." Perennial 4 to 6 feet high. This magnificent species is found along the banks of streams in our mountain ranges. The plants are of fine appearance, having stout stems and large handsome foliage. The flowers are in very long racemes, deep pink or rose-purple and very showy. Pkt. 10c.



SALVIA CARDUACEA "Thistle Sage" For description see page 20.

Lupinus hirsutissimus. "Hairy Lupine." Annual 1½ to 2½ feet high. Rather stout stems covered with stiff hairs. Flowers large, deep reddish purple, very showy. Pkt. 10c; oz. \$1.00.

Lupinus nanus. "Dwarf Blue Lupine." Annual 10 to 15 inches. A very showy plant, branching from the base, stems and leaves hairy. Flowers in small racemes, rich blue and white, fragrant. Very effective for sowing in masses. Pkt. 5c; oz. 35c; lb. \$3.50.

Malacothrix californica. Annual 6 to 12 inches high. Flowers large, resembling a hawkweed, cream and yellow beautifully blended. A pretty little plant doing especially well on sandy soil. Pkt. 10c.

Meconopsis heterophylla. "Flaming Poppy." Annual 1 to 2 feet high. Flowers salmon-colored or brick red, of exquisite beauty, the petals having the delicate satin texture of the poppy. A slender, fragile plant usually found in shady or partially shady places. Pkt. 10c.

Mentzelia laevicaulis. "Blazing Star." Biennial 2 to 3 feet high. An attractive plant with shining white, almost smooth stems and narrow deeply toothed, graygreen leaves. Flowers are in clusters of 2 to 3 at the ends of the branches, 3 to 4 inches in diameter, with very long stamens. Petals long, narrow, pale yellow. Pkt. 10c.



SILENE LACINIATA
"Indian Pink"
For description see page 21.

Mentzelia lindleyi. "Blazing Star." Annual 2 to 3 feet high. Yellowish glistening stems, deeply toothed, green leaves. Flowers large, of delicate silken texture, rich golden yellow. One of the most brilliant of all flowers, especially valuable for sowing in dry, sandy or rocky places, continuing in flower until mid-summer. Pkt. 5c; oz. 50c; lb. \$5.00.

Mimulus brevipes. "Yellow Monkey Flower." Annual 1 to 1½ feet high. Bright green lanceolate leaves. Flowers large, clear canary yellow. Pkt. 10c.

Mimulus cardinalis. "Scarlet Monkey Flower." Perennial 1 to 3 feet high. Pale green leaves, bright scarlet flowers with yellow throat. Found growing along streams or in wet places. Pkt. 10c.

Mimulus glutinosus. "Sticky Monkey Flower." Shrub 2 to 5 feet high. Found growing on many hillsides and particularly attractive when in flower with its masses of large buff or salmon-colored blossoms which resemble an azalea in shape. If watered it may be had in flower the year round. Pkt. 15c.

Mimulus luteus. "Common Monkey Flower." Annual 2 to 3 feet high. Handsome bright yellow flowers and shiny green foliage. Grows in wet places. Pkt 10c.

Nemophila aurita. "Trailing Nemophila." Annual, stems 1 to 3 feet long generally trailing over underbrush on shady banks. Flowers purplish violet. Pkt. 5c.



TRICHOSTEMA LANATUM
"Romero" or "Woolly Bluecurls"
For description see page 21.

Nemophila insignis. "Baby-Blue-Eyes." Annual 4 to 8 inches high. Words are almost inadequate to describe the ethereal beauty of this delicate little flower. The plants are of low spreading growth and blossom in an incredibly short time after sowing the seed, covering the ground with a perfect carpet of clear azure blue flowers. It will grow anywhere but thrives best in shade or partial shade, is valuable for sowing under trees, on shady banks, in little nooks here or there, and in fact any waste spots. The seed should be scattered freely everywhere; it flowers almost before you are aware of it and everyone is charmed with the effect when it bursts forth into bloom with its myriads of innocent looking little baby blue cups. Pkt. 5c; oz. 25c; lb. \$2.50.

Nemophila maculata. "Spotted Nemophila." Annual 4 to 8 inches high. A beautiful little plant of spreading habit. Flowers white with large deep purple blotch on each petal. Does well in shady or partially shady places. Pkt. 5c; oz. 25c; lb. \$2.50.

Oenothera biennis hirsutissima. "Yellow Evening Primrose." Biennial 3 to 6 feet high. Stout reddish stems, light green, hairy, lanceolate leaves. Flowers large, light vellow. Found growing along streams or in wet places. Pkt. 10c.



VIOLA PEDUNCULATA "Yellow Violet" For description see page 21.

Oenothera californica. "White Evening Primrose." Perennial 1 to 2 feet high. Generally found growing in dry sandy places. The flowers are very beautiful, 2 to $2\frac{1}{2}$ inches across, of silken texture, white turning to rosecolor and fragrant. Pkt. 10c.

viridescens. "Beach Evening Primrose." Oenothera Perennial of trailing habit with thick silvery foliage and bright yellow flowers produced in great numbers. Grows in pure beach sand. Pkt. 10c.

Orthocarpus purpurascens. "Owl's Clover" or "Pink Paint Brush." Annual 4 to 10 inches high. Much branched and bearing large heads of small flowers, color center of flower cream, shading to rose, pink or purplish lavender. Pkt. 5c.

Pentstemon antirrhinoides. "Yellow Pentstemon." ennial shrub 3 to 4 feet high. Small narrow light green foliage; flowers large, bright yellow. Seed of this and the following six species grow quite easily in seed boxes and can afterwards be transplanted. Pkt. 10c.

- Pentstemon centranthifolius. "Scarlet Bugler." Perennial 2 to 4 feet high. Glaucous foliage and long spikes of rich vermilion flowers. Pkt. 10c.
- Pentstemon cordifolius. "Scarlet Honeysuckle." Perennial 6 to 8 feet high. A tall woody plant usually growing among shrubs which it uses for support. Resembles a fuchsia both in foliage and flowers; color a bright orange scarlet. Pkt. 10c.
- Pentstemon heterophyllus. "Violet Beard Tongue." Perennial 1½ to 2 feet high. A bushy plant with narrow pale green leaves and numerous spikes of trumpetshaped flowers, royal purple marked with pink. Pkt. 10c.
- Pentstemon labrosus. "Scarlet Pentstemon." Perennial 1 to 2 feet high. A splendid species from the pine belt of our mountains. The plants throw up many stems with rather narrow, dark green, sometimes bronze colored leaves, and spikes of bright scarlet tubular flowers; exceeding showy and free flowering. Pkt. 15c.
- Pentsten.on palmeri. "White Pentstemon." Perennial 1½ to 2½ feet high. A spreading plant with thick glaucous foliage and large flowers, creamy white shaded with pink. Pkt. 15c.
- Pentstemon spectabilis. "Blue Pentstemon." Perennial 4 to 7 feet high. This is one of the grandest and most stately of all our native plants. Flowers are large and in great spikes often 3 feet long; color is the richest combination of blue and royal purple. In every way a majestic flower. Pkt. 10c, oz. \$1.00.
- Phacelia grandiflora. "Large Flowered Phacelia." Annual 1 to 3 feet high. Large saucer-shaped flowers in color varying from lavender to white, beautifully streaked and veined with violet purple. Pkt. 10c.
- Phacelia parryi. "Parry's Phacelia." Annual 1 to 1½ feet high. Flowers saucer-shaped, deep violet, generally with five yellow spots. Pkt, 10c, oz. 50c.
- Phacelia tanacetifolia. "Wild Heliotrope." Annual 1½ to 2½ feet high. An erect growing plant with deeply cut foliage and large heads of violet blue flowers. Pkt. 5c; oz. 25c; lb. \$2.50. Jan 20

 Phacelia whitlavia. "Wild Canterbury Bell." Annual 1
- Phacelia whitlavia. "Wild Canterbury Bell." Annual 1 to 1½ feet high. Large bell-shaped flowers hanging in open airy clusters, color violet purple. Stems reddish, leaves dark green slightly crinkled. Pkt. 5c; oz. 50c.
- Platystemon californicus. "Cream-cups." Annual 6 to 10 inches high. Cream colored flowers of the peculiar delicacy characteristic of the poppy family. Narrow leaves, slender, hairy stems and gracefully nodding buds. A charming little plant. Pkt. 5c.
- Romneya coulteri. "Matilija Poppy." Perennial 6 to 10 feet high. The Queen of California flowers, truly a majestic plant. The plant throws up numerous woody stems with handsome gray-green foliage, topped with large numbers of flowers. The blossoms are often 6 or 7 inches in diameter, of a crepe-like texture, pure glistening white with bright yellow centers. The seed is hard to germinate: some people claim to have had success by soaking it in a weak solution of lye. Pkt. 10c.
- Salvia carduacea. "Thistle Sage." Annual 1 to 2 feet high. An attractive plant; has thistle-like woolly foliage and large, airy, fantastic heads of blossoms of pale lavender. Pkt. 10c, oz. 50c, lb. \$6.00.

- Silene laciniata. "Indian Pink." Perennial; stems 1 to 3 feet long, with many widely spreading branches, sometimes growing erect but more often decumbent. Flowers bright scarlet with edge of petals beautifully laciniated. Pkt. 10c.
- Sisyrinchium bellum. "Blue Eyed Grass." Perennial 8 to 15 inches high. A charming little flower belonging to the Iris family. Flowers bright blue with yellow centers, light green grass-like foliage. Pkt. 10c.
- Solanum wallacei. "Catalina Nightshade." Shrubby perennial 4 to 6 feet high. A showy plant with rather heavy woolly foliage; flowers deep violet. Pkt. 15c.
- Solanum xanti. "Violet Nightshade." Shrubby perennial 2 to 5 feet high. Flowers deep violet, foliage light green. An attractive plant for groups and masses. Pkt. 10c.
- Trichostema lanatum. "Romero" or "Woolly Bluecurls."

 Perennial shrub 4 to 6 feet high. Flowers blue, in spikes often a foot long and the whole inflorescence clothed with a dense violet colored wool. The foliage is narrow, glossy green above and whitish beneath. This is really a most remarkable shrub, growing as it does on dry ridges and flowering profusely in the middle of summer. Valuable for planting on dry banks. Pkt. 10c.
- Viola pedunculata. "Yellow Violet." Perennial 4 to 8 inches high. A most charming little plant. Flowers yellow the two upper petals beautifully blotched with brown on the outside. Flower stems long and erect: a proud little flower. Pkt. 15c.
- Zarschneria californica. "California Fuchsia." Perennial 1 to 1½ feet high. Large, trumpet-shaped flowers, color vivid scarlet. Very effective for covering dry banks, flowering freely in summer and fall. Pkt. 15c.

California Wild Flower Seeds In Mixtures

In ordering these it is only necessary to mention the number of the mixture desired.

- **No. 1.** General mixture of annual wild flower seeds. This mixture is made up of those kinds which will give a succession of flowers for a long period and will succeed under ordinary conditions. Pkt. 5c, oz. 30c, lb. \$4.00.
- No. 2. Mixture of annual wild flower seeds for sowing in shady places. Pkt. 10c, oz. 35c, lb. \$5.00.
- No. 3. Mixture of annual wild flower seeds in orange, yellow and cream shades. Pkt. 10c, oz. 45c, lb. \$6.00.
- No. 4. Mixture of annual wild flower seeds in blue, purple and layender shades. Pkt. 10c, oz. 35c, lb. \$5.00.

SPECIAL SOUVENIR COLLECTION OF CALIFORNIA WILD FLOWER SEEDS

This collection contains twelve choice species of California Wild Flowers in separate packets, mostly annuals of easy culture, and includes the California Poppy, the Baby-Blue-Eyes, the Scarlet Larkspur, the Blue Lupine, the Blazing Star, the Wild Heliotrope and six others of my selection, mailed free to any part of the world for 50c.

CALIFORNIA NATIVE BULBS

All species except Lilies can be supplied from August to November; Lilies, September to December. Best results are obtained from early planting. Prices quoted include postage.

BLOOMERIA

Bloomeria aurea. "Golden Stars." Plants grow from 9 to 15 inches high, flowering in umbels of from 15 to 50 golden-yellow, star-shaped flowers. Thrives the heavy but well drained soil. Plant from 3 to 4 inches deep. Each 5c; doz. 40c.

BRODIAEA

Brodiaea capitata. "Cluster Lily" or "Wild Hyacinth." Flowers in clusters, violet to light blue, grows from 1 to 2 feet high. This and the following species will grow in any good loam, well drained; plant 3 inches deep. Each 5c; doz. 40c.



BRODIAEA LAXA "Ithuriel's Spear"

Brodiaea coccinea, "Floral Firecracker." A striking and beautiful plant, with long slender stems, headed with numerous tubular, bright crimson flowers, which are tipped with pale green. Very effective for planting in rock works, among ferns. Each 5c; doz. 50c.

Brodiaea grandiflora. "Harvest Brodiaea." A late flowering species. It grows from 6 inches to 1 foot high, with 5 to 10 large flowers on a stem, of a rich violet-purple shade. Each 5c; doz. 40c.

Brodiaea laxa. "Ithuriel's Spear." A magnificent species; grows from 1 to 2 feet high. Flowers very large in umbels of from 10 to 30, violet or purple. Each 5c; doz. 50c. BARVOOT 12 ida

doz. 50c.

biliactae - Lilieae. CALOCHORTUS

"Mariposa Lily" or "Butterfly Tulip." The flowers are of the most varied and showy colors and resemble a tulip in form. Among the most beautiful of our native plants. The following species grow best in a rather heavy loam but must have good drainage. Plant 4 to 5 inches deep.

Calochortus albus. "Fairy Bell" or "White Globe Tulip." An extremely graceful plant. The flowers are pendant like bells and globular in form, of the most exquisite silky texture and pearly white, from 10 to 20 on a plant.

Grows 1 to 2 feet high and prefers a shady situation. Each 5c; doz. 40.

Vative of Mts. of Cal.



CALOCHORTUS PLUMMERAE "Late Flowering Mariposa Lily" For description see page 24.

Calochortus catalinae. "Mariposa Lily." Large handsome flowers, white or lilac with a large maroon spot at the base of each petal. Height 1 to 2 feet; blooms several weeks before other Mariposas. Each 10c; doz. \$1.00.

Large flowers, sometimes 4 to 5 inches across, shaped like a broad based bowl; deep rich yellow, the lower half covered with stiff yellow hairs. Sturdy zigzag stems 2 to 3 feet high. Each 15c; doz. \$1.50.

Calochortus luteus. "Yellow Mariposa Lily." Flowers yellow with penciled lines radiating from the base to center of petals and covered with dense yellow silky hairs. Plants grow 6 to 12 inches high. Each 5c; doz. 50c.

Calochortus plummerae. "Late Flowering Mariposa Lily." Large flowers, rich lavender purple, lined with long yellow, silky hairs. Grows 2 to 3 feet high. This species is particularly easy to grow, and will succeed in almost any garden. Flowers in early summer. Each 5c; doz. 50c.

Calochortus pulchellus. "Yellow Globe Tulip." A charm-

ing plant with slender stems and pendant, globular flowers, lemon-yellow in color. Height about 1 foot;

prefers a shady situation. Each 10c; doz. \$1.00.

Pala Calochortus splendens. "Lilac Mariposa Lily." Flowers pale lilac, 2 to 3 inches across, lower part of the petals covered with long cob-webby hairs. Each 5c; doz. 50c.

Calochortus venustus. "White Mariposa Lily." Flowers white or pale lilac with reddish purple spot on the upper portion of each petal, a yellowish arch in the center and brown pencilings at base. Each 5c; doz. 50c.

ERYTHRONIUM

1919-Erythronium californicum. "Dog's Tooth Violet." flower of rare beauty from the woodlands of the northern part of our state. The leaves are large, dark green, richly mottled with brown, and the flowers come 6 to 10, and sometimes more, on a stem. They are large, creamy yellow, often with a maroon band at the base. It thrives best in a loose, gritty soil, enriched with plenty of leaf mold, in a shady location, and should be planted about 2 inches deep. Each 5c; doz. 50c.

FRITILLARIA

Fritillaria lanceolata. "Mission Bells." An odd looking and interesting flower. It throws up a stem from one to two feet high, with whorls of shining green leaves, and with a string of pendant, bell-shaped flowers, which are bronze colored, beautifully mottled and checkered with dull green and purple. This and the following species both require a shady location, and a light, well drained soil, enriched with plenty of leaf mold. Plant Each 10c; doz. \$1.00. the bulbs about two inches deep.

ritillaria recurva. "Scarlet Fritillary." A magnificent species and really the finest of the genus. The plants grow from 10 to 18 inches high, and produce from 3 to - Fritillaria recurva. 12 flowers on a stem of a brilliant scarlet, spotted with orange in the throat. Each 10c; doz. \$1.00.

LILIUM

Lilium humboldtii. "Humboldt's Lily" or "Tiger Lily." stately species growing 5 to 8 feet high. Flowers 8 to 12 arranged in a pyramidal raceme on a stout leafy stem; deep orange spotted with maroon; often 5 to 6 Grows in partially shaded places inches in diameter. in rich loam mixed with decomposed leaves, requires good drainage. Each 25c; doz. \$2.50.

dlium pardalinum. "Leopard Lily." A magnificent species, and of easy cultivation. Plants grow from 3 to tre Lilium pardalinum. 6 feet high, with broad leaves and many large, showy flowers; reddish orange, heavily dotted with maroon,

and tipped with red. Each 25c; doz, \$2.50.
Lilium parryi. "Lemon Lily." A rare and exquisite species. Flowers large, on slender leafy stems, trumpetshaped, lemon-yellow and very fragrant. Grows 2 to 4 feet high. Requires a moist situation; light, sandy soil mixed with plenty of leaf mold. Each 30c; doz. \$3.00.

Acalochortus amabilis. Each 10\$. Early June 1919 Native of northern Cal. Shade (Bailey) HB Calochartus eldovado = C. venustus Early Vorr. eldorado. Each St. Sun (Bailey) Native of southern foothills of Sierra Nevada Cal. 1919